

ABSTRACT OF THE DISCLOSURE

A method is presented for effectively manufacturing multi-wall (double-wall, etc.) carbon nanotubes (CNTs) having a structure whereby interior tubes are formed within the CNTs. In this manufacturing method, fullerene/CNT hybrid structures are prepared, wherein assembled fullerenes, these being fullerenes that are linked, have been housed within single-wall CNTs. The interior tubes are formed from the assembled fullerenes by subjecting the hybrid structures to electron beam irradiation while in a heated state. It is preferred that irradiation with the electron beams occurs at a temperature of 100 ~ 500°C and with the electron beams having an accelerating voltage of 80 ~ 250 kV. According to the manufacturing method of the present invention, multi-wall CNTs with few defects can be manufactured at lower temperatures and in a shorter period than in the case where the fullerene/CNT hybrid structures are only maintained under high temperature conditions (and electron beam irradiation is not performed).